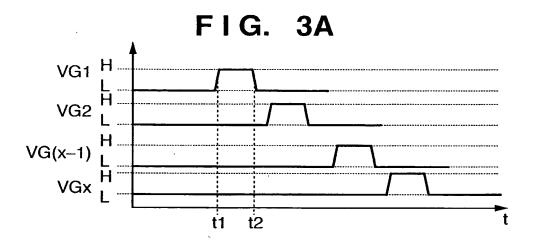
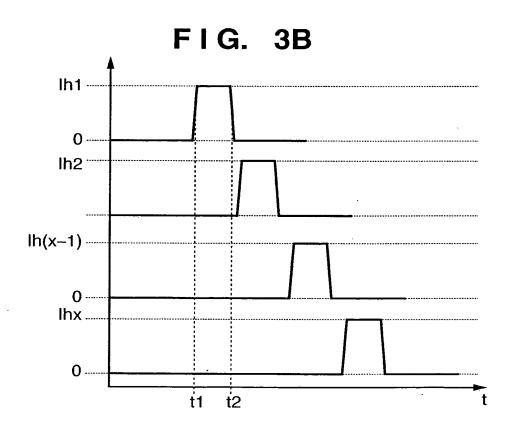
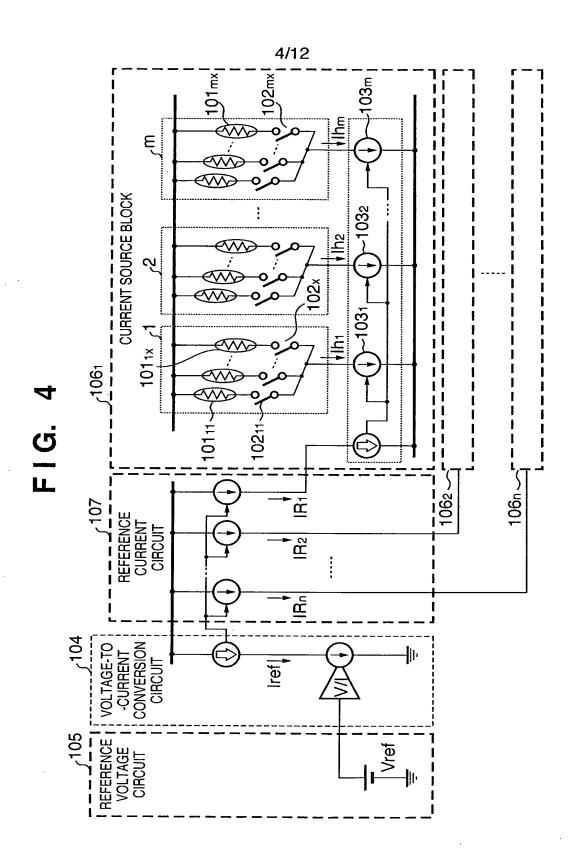


INVENTOR: NOBUYUKI HIRAYAMA TITLE: PRINTHEAD, PRINTHEAD SUBSTRATE, INK CARTRIDGE, AND PRINTING APPARATUS HAVING PRINTHEAD Sheet 3 of 12 Docket No.: 00862.103495

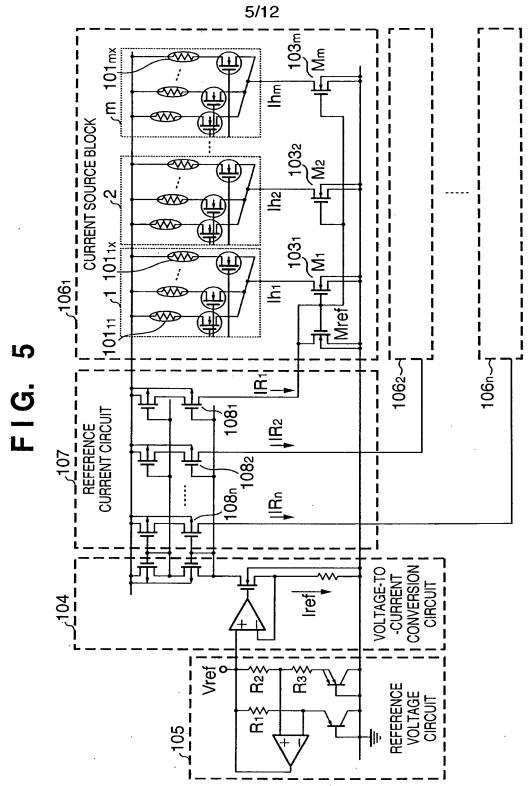




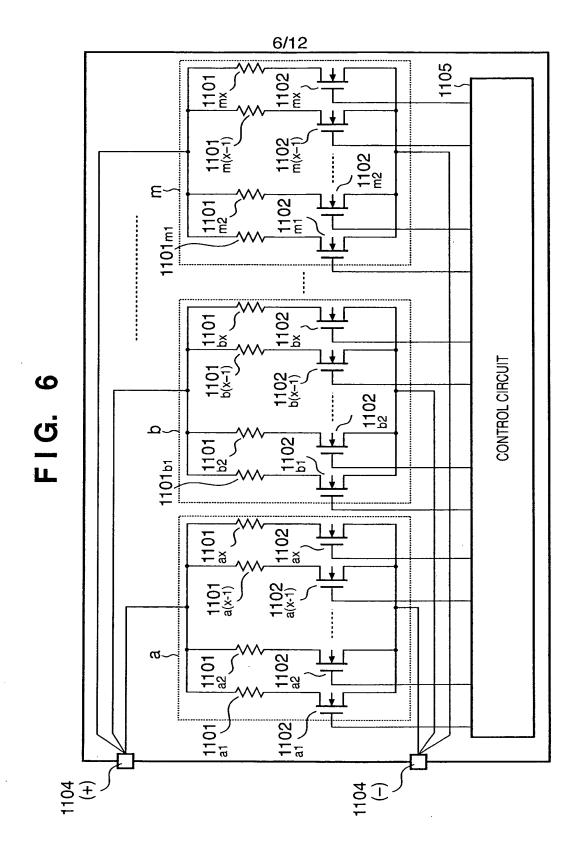


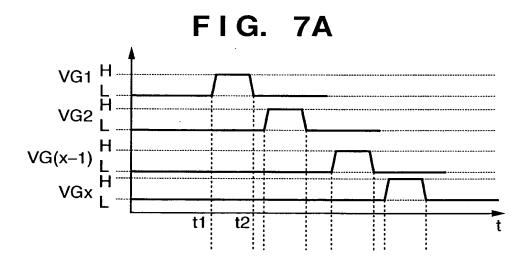
INVENTOR: NOBUYUKI HIRAYAMA TITLE: PRINTHEAD, PRINTHEAD SUBSTRATE, INK CARTRIDGE, AND PRINTING APPARATUS HAVING PRINTHEAD Sheet 5 of 12 Docket No.: 00862.103495

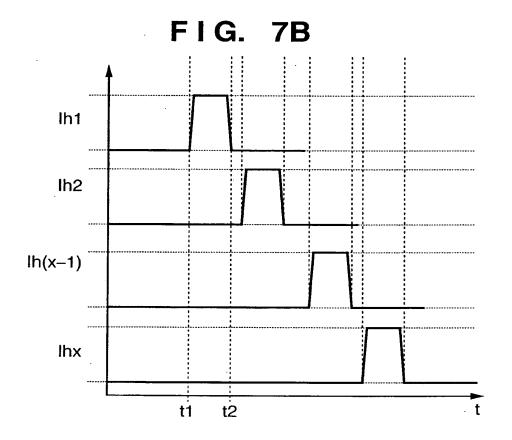




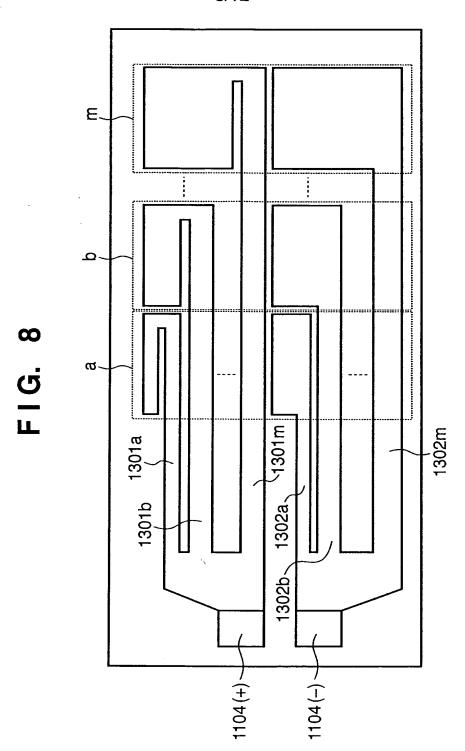
Sheet 6 of 12 Docket No.: 00862.103495



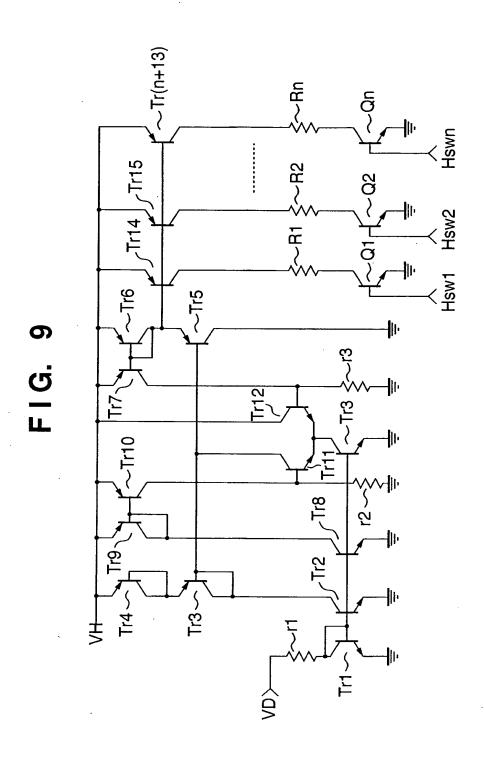




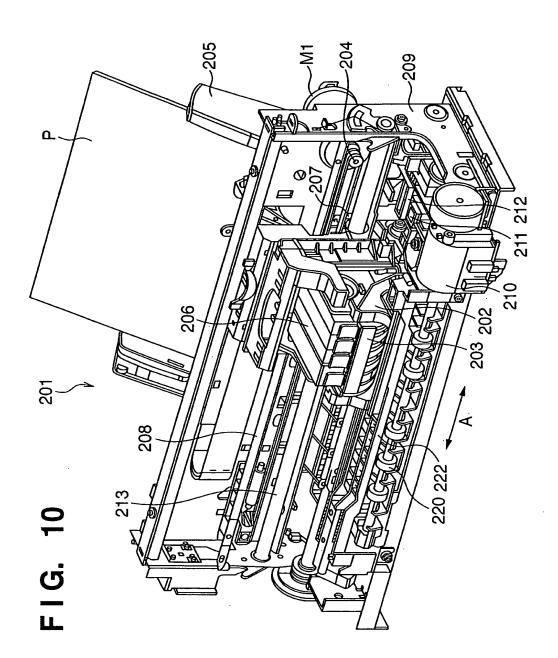
8/12



9/12

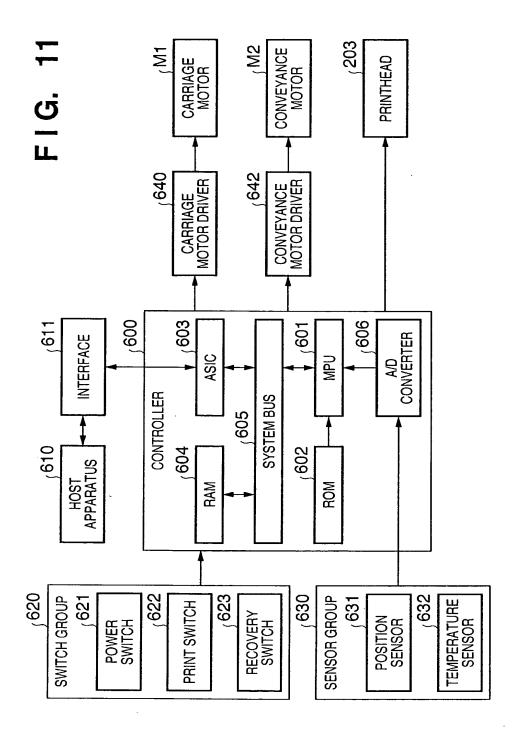


INVENTOR: NOBUYUKI HIRAYAMA
TITLE: PRINTHEAD, PRINTHEAD SUBSTRATE,
INK CARTRIDGE, AND PRINTING APPARATUS
HAVING PRINTHEAD
Sheet 10 of 12
Docket No.: 00862.103495



J U E ...

Sheet 11 of 12 Docket No.: 00862.103495



INVENTOR: NOBUYUKI HIRAYAMA
TITLE: PRINTHEAD, PRINTHEAD SUBSTRATE,
INK CARTRIDGE, AND PRINTING APPARATUS
HAVING PRINTHEAD
Sheet 12 of 12
Docket No.: 00862.103495

12/12

## FIG. 12

